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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,601	07/24/2001	Robert Albert Boie	19-9-7	3664

7590 06/04/2004
Docket Administrator
Lucent Technologies Inc.
101 Crawfords Corner Road (Room 3J-219)
Holmdel, NJ 07733-3030

EXAMINER

LEE, JOHN D

ART UNIT PAPER NUMBER

2874

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/911,601

Applicant(s)

BOIE ET AL.

Examiner

John D. Lee

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-33 is/are allowed.
- 6) ☒ Claim(s) 34 and 36 is/are rejected.
- 7) ☒ Claim(s) 35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

This Office action is responsive to applicant's amendment submitted on April 19, 2004. Claims 1-36 are pending and subject to examination.

Applicant's amendments have obviated the previously indicated objections to the claims and the previously indicated rejection of claims 2 and 9 under 35 U.S.C. § 112, second paragraph. Such objections and rejection are, accordingly, withdrawn. With respect to *most* of the pending claims, as explained further below, applicant's response has overcome the previously applied rejection under 35 U.S.C. § 103(a) based upon the Bartlett et al reference. Two claims, however, remain subject to rejection.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 34 and 36 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,638,784 to Bartlett et al. Bartlett et al discloses a packaged micro electrical mechanical system (MEMS) device, comprising a packaging within which is mounted at least one optical MEMS device, and a distinct integrated circuit chip mounted upon the packaging. It is clear, and would have been obvious to a person of ordinary skill in the art, that the Bartlett et al packaging is adapted to maintain the optical MEMS device in a prescribed optical relationship with at least one other optical component (for this is the purpose of the packaged Bartlett et al device). Bartlett et al does not disclose that the integrated circuit chip contains circuitry of at least one of the type of the set consisting of low-voltage digital-to-analog converters, high-voltage amplifiers, and demultiplexers. In fact, Bartlett et al does not divulge any details regarding the integrated

circuit chips therein. This lack of specific disclosure would imply to a person of ordinary skill in the art, then, that the subject packaging arrangement is applicable to any and all kinds of integrated circuit chips associated with an optical MEMS device. The person of ordinary skill would know that many optical MEMS devices require low-voltage digital-to-analog converters and higher-voltage amplifiers, as well as demultiplexers (when used in a typical communications application). It would thus have been obvious to include, in the Bartlett et al packaging arrangement, an integrated circuit chip containing circuitry of at least one of the type of the set consisting of low-voltage digital-to-analog converters, high-voltage amplifiers, and demultiplexers.

Claims 1-33 are allowed. Bartlett et al (the closest prior art of record) does not disclose or reasonably suggest a packaged micro electrical mechanical system (MEMS) device, comprising a packaging including at least two distinct integrated circuit chips, one of which contains low-voltage digital-to-analog converters, and a second of which contains high-voltage amplifiers, with the at least two distinct integrated circuit chips being mounted upon the packaging. Bartlett et al further does not disclose or reasonably suggest a method for forming a packaged micro electrical mechanical system (MEMS) device, comprising mounting at least two distinct integrated circuit chips to a package containing at least one optical MEMS device, wherein a first one of the distinct integrated circuit chips contains low-voltage digital-to-analog converters, and a second of the distinct integrated circuit chips contains high-voltage amplifiers.

Claim 35 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. As noted above, Bartlett et al (the closest prior art of

record) does not disclose or reasonably suggest a packaged micro electrical mechanical system (MEMS) device, comprising a packaging including two distinct integrated circuit chips, one of which contains low-voltage digital-to-analog converters, and a second of which contains high-voltage amplifiers, with the two distinct integrated circuit chips being mounted upon the packaging.

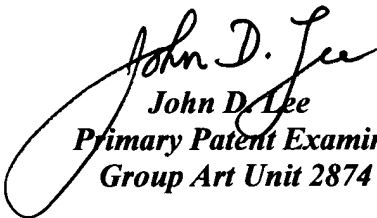
Applicant's arguments submitted on April 19, 2004, with respect to the above-rejected claims, have been fully considered but they are not deemed to be persuasive. Applicant's primary argument is that Bartlett et al does not disclose the mounting of *multiple chips* onto a packaging (see page 10, last two paragraphs, of applicant's response). After careful study, the Examiner agrees with this argument, but the two above-rejected claims do not include the limitation of mounting multiple chips. With respect to claims 34 and 36 therefore, the argument is not persuasive and the rejection is maintained.

THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR § 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and an advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR § 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2874

Any inquiry concerning the merits of this communication should be directed to Examiner John D. Lee at telephone number (571) 272-2351. The Examiner's normal work schedule is Tuesday through Friday, 6:30 AM to 5:00 PM. Any inquiry of a general or clerical nature (i.e. a request for a missing form or paper, etc.) should be directed to the Technology Center 2800 receptionist at telephone number (571) 272-1562, to the technical support staff supervisor (Team 8) at telephone number (571) 272-1564, or to the Technology Center 2800 Customer Service Office at telephone number (571) 272-1626.


John D. Lee
Primary Patent Examiner
Group Art Unit 2874